



SEQUENCE LISTING

<110> Field, Loren J.
Tsai, Shih-Chong

<120> P193 PROTEINS AND NUCLEIC ACIDS, AND USES THEREOF

<130> IUPAC-PCT

<140> Not Yet Known
<141> 2000-08-23

<150> 60/150,266
<151> 1999-08-23

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<170> PatentIn Ver. 2.1

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TECH CENTER 1600/2800

DEC 03 2002

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850 855 860

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Val Leu Gly Pro Lys Pro Thr Phe Trp Pro Val Phe Arg Glu Gln Leu
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 Trp Ser Ala Gly Arg Met Ile Gln Ala Leu Ser Ser His Asp Ala Gly
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Asp Glu Gly Gln Phe Arg Gln Ser Asn Asp Gly Val Pro Pro Ala Gln
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Val Leu Trp Asp Ser Thr Gly His Thr Tyr Trp Val His Trp His Met
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Leu Glu Ile Leu Gly Phe Glu Glu Asp Ile Glu Asp Val Ile Asp Ile
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Glu Glu Leu Gln Glu Leu Gly Ala Asn Gly Ala Leu Ser Ile Val Pro
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Pro	Ala	Trp	Val	Val	Val	Cys	Gly	Gly	Asn	Ser	Ile	Lys	Ser	Val	Asn
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Val Leu Gly Pro Lys Pro Thr Phe Trp Pro Val Phe Arg Glu Gln Leu
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Cys Arg His Thr Arg Leu Phe Tyr Met Val Arg Ala Gln Ala Trp Ser
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Gln Asp Ile Ala Glu Asp Arg Arg Ser Leu Leu His Leu Ser Ser Arg
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 Met Val Gly Glu Leu Arg Tyr Arg Glu
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 Phe Arg Val Pro Leu Gly Pro Gly Leu His Ala Tyr Pro Asp Glu Leu
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 Ile Arg Gln Arg Val Gly His Asp Gly His Pro Glu Tyr Gln Ile Arg
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 Trp Leu Ile Leu Arg Arg Gly Asp Glu Gly Asp Gly Ser Gly Gln
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 Val Asp Cys Lys Ala Glu His Ile Leu Leu Trp Met Ser Lys Asp Glu
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 Ile Tyr Ala Asn Cys His Lys Met Leu Gly Glu Asp Gly Gln Val Ile
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 Val Leu Glu Glu Met Glu Thr Asp Val Lys Ser Leu Ile Gln Arg Ala
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Leu His Thr Val His Val Leu Ser Ala Tyr Ala Ser Ile Glu Pro Leu			
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Thr Gly Val Phe Lys Asp Pro Arg Val Leu Asp Leu Leu Met His Met			
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caa gcc ctg tcc tcc cat gac gct ggg acc cgg act cag atc ctt ctg		689	
Gln Ala Leu Ser Ser His Asp Ala Gly Thr Arg Gln Ile Leu Leu			
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tca ctg agc caa caa gaa gcc att gag aaa cac ctg gat ttt gac agc		737	
Ser Leu Ser Gln Gln Glu Ala Ile Glu Lys His Leu Asp Phe Asp Ser			
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Arg Cys Ala Leu Leu Ala Leu Phe Ala Gln Ala Thr Leu Ser Glu His			
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Pro Met Ser Phe Glu Gly Ile Gln Leu Pro Gln Val Pro Gly Arg Val			
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Leu Phe Ser Leu Val Lys Arg Tyr Leu His Val Thr Ser Leu Leu Asp			
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Gln Leu Asn Asp Ser Ala Ala Glu Pro Gly Ala Gln Asn Thr Ser Ala			
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Pro Glu Glu Leu Ser Gly Glu Arg Gly Gln Leu Glu Leu Glu Phe Ser			
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Gin Ala Gin Pro Ser Phe Arg Arg Ser Arg Arg Phe Arg Pro Arg Ser			
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 Ala Gly Asp Glu Gly Glu Phe Arg Gln Ser Asn Asn Gly Val Pro Pro
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 Val Gln Val Phe Trp Glu Ser Thr Gly Arg Thr Tyr Trp Val His Trp
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 His Met Leu Glu Ile Leu Gly Phe Glu Glu Asp Ile Glu Asp Met Val
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 Ala Leu Pro Ala Trp Arg Trp Arg Pro Met Thr Glu Leu Tyr Ala Val
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 Pro Tyr Val Leu Pro Glu Asp Glu Asp Thr Glu Glu Cys Glu His Leu
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 Thr Leu Ala Glu Trp Trp Glu Leu Leu Phe Phe Ile Lys Lys Leu Asp
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 Gly Pro Asp His Gln Glu Val Leu Gln Ile Leu Gln Glu Asn Leu Asp
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aac act ccc ctg cag cgt ctg gtg gag ggt tat ggt cca gct ggg aaa 1985		
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Cys Leu Arg Ser Pro Asn Thr Asp Arg Glu Val Leu Gln Glu Leu Ile 715	720	725
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His Leu Gly Lys Leu Glu Leu Ala Gln Glu Leu Arg Asp Met Val Phe 765	770	775
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3809
 Gln Gln Ile Gln Gly Ser Arg Ile Gly Gly Ala Gln Glu Met Glu Arg
 1230 1235 1240
 ctg gca cag ctg cag caa tgc ctg caa gct gtc ctg att ttc tcc ggc
 3857
 Leu Ala Gln Leu Gln Gln Cys Leu Gln Ala Val Leu Ile Phe Ser Gly
 1245 1250 1255
 ttg gag ata gcc acc act ttt gag cat tat tac cag cac tac atg gcg
 3905
 Leu Glu Ile Ala Thr Thr Phe Glu His Tyr Tyr Gln His Tyr Met Ala
 1260 1265 1270
 gac cgt ctc ctg ggc gtg gtc tcg agc tgg ctg gag ggg gcc gtg ctg
 3953
 Asp Arg Leu Leu Gly Val Val Ser Ser Trp Leu Glu Gly Ala Val Leu
 1275 1280 1285
 gag cag atc ggt ccc tgc ttc ccc aac cgc ctc ccc cag cag atg ttg
 4001
 Glu Gln Ile Gly Pro Cys Phe Pro Asn Arg Leu Pro Gln Gln Met Leu
 1290 1295 1300 1305
 cag agc ctg agc acc tct aag gag ctg cag cgc cag ttc cac gtc tac
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 Gln Ser Leu Ser Thr Ser Lys Glu Leu Gln Arg Gln Phe His Val Tyr
 1310 1315 1320
 cag ctc cag cag ctg gat cag gaa ctc cta aag ctg gag gat aca gag
 4097
 Gln Leu Gln Leu Asp Gln Glu Leu Leu Lys Leu Glu Asp Thr Glu
 1325 1330 1335
 aag aaa ata cac gtg ggc ctt ggg gcc agt ggc aag gag cac aag agc
 4145
 Lys Lys Ile Gln Val Gly Leu Gly Ala Ser Gly Lys Glu His Lys Ser
 1340 1345 1350
 gag aag gaa gag gaa gct ggg gca gca gca gtg gtg gat gtg gcg gag
 4193
 Glu Lys Glu Glu Glu Ala Gly Ala Ala Ala Val Val Asp Val Ala Glu
 1355 1360 1365
 gga gag gag gaa gag gag aat gag gac ctc tac tat gaa ggg gca
 4241
 Gly Glu Glu Glu Glu Glu Asn Glu Asp Leu Tyr Tyr Glu Gly Ala
 1370 1375 1380 1385
 atg cca gaa gtg tct gtg ctt gtc ctg tcc cga cac tac tgg cct gtt
 4289
 Met Pro Glu Val Ser Val Leu Val Leu Ser Arg His Ser Trp Pro Val
 1390 1395 1400
 gcc tca atc tgc cac aca ctg aac ccc aga acc tgc ctg ccc tcc tac
 4337
 Ala Ser Ile Cys His Thr Leu Asn Pro Arg Thr Cys Leu Pro Ser Tyr
 1405 1410 1415
 ctg agg ggc act ttg aac aga tac tcc aac ttc tac aac aag agt cag
 4385
 Leu Arg Gly Thr Leu Asn Arg Tyr Ser Asn Phe Tyr Asn Lys Ser Gln
 1420 1425 1430
 agc cac cct gcc ctt gag cga ggc tca cag agg cga ctg cag tgg aac
 4433

Ser His Pro Ala Leu Glu Arg Gly Ser Gln Arg Arg Leu Gln Trp Thr
 1435 1440 1445
 tgg ctg ggc tgg gct gag ctg cag ttt ggg aac cag acc ctg cat gtg
 4481
 Trp Leu Gly Trp Ala Glu Leu Gln Phe Gly Asn Gln Thr Leu His Val
 1450 1455 1460 1465
 tcc acc gtg cag atg tgg cta ctg ctg tat ctc aac gac ctg aag gcg
 4529
 Ser Thr Val Gln Met Trp Leu Leu Tyr Leu Asn Asp Leu Lys Ala
 1470 1475 1480
 gtc tct gtg gag agt ctg ctg gcg ttc tca ggg ctc tcc gca gac atg
 4577
 Val Ser Val Glu Ser Leu Leu Ala Phe Ser Gly Leu Ser Ala Asp Met
 1485 1490 1495
 ctc sat cag gcg att ggg ccc ctc acc tct tca aga ggc ccc ctg gac
 4625
 Leu Asn Gln Ala Ile Gly Pro Leu Thr Ser Ser Arg Gly Pro Leu Asp
 1500 1505 1510
 ctt cac gag caa aag gat ata cca gga ggg gtc ctc aag att cga gat
 4673
 Leu His Glu Gln Lys Asp Ile Pro Gly Gly Val Leu Lys Ile Arg Asp
 1515 1520 1525
 ggc agc aag gaa ccc agg tgg aga tgg gac att gtg cgg ctc atc cca
 4721
 Gly Ser Lys Glu Pro Arg Ser Arg Trp Asp Ile Val Arg Leu Ile Pro
 1530 1535 1540 1545
 ect cag acg tac ctg caa gct gag ggt gaa gac ggc cag aac ttg gag
 4769
 Pro Gln Thr Tyr Leu Gln Ala Glu Gly Glu Asp Gly Gln Asn Leu Glu
 1550 1555 1560
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 Lys Arg Arg Asn Leu Leu Asn Cys Leu Ile Val Arg Ile Leu Lys Ala
 1565 1570 1575
 cat gga gat gag ggg ctg cac att gac cag ctt gtc tgt ctg gtg ctg
 4865
 His Gly Asp Glu Gly Leu His Ile Asp Gln Leu Val Cys Leu Val Leu
 1580 1585 1590
 gag gct tgg cag aag ggc ccg tgt cct ccc agg ggt ttg gtc agc agc
 4913
 Glu Ala Trp Gln Lys Gly Pro Cys Pro Pro Arg Gly Leu Val Ser Ser
 1595 1600 1605
 ctt ggt aag ggg tct gca tgc agc agc act gac gtc ctc tcc tgc atc
 4961
 Leu Gly Lys Gly Ser Ala Cys Ser Ser Thr Asp Val Leu Ser Cys Ile
 1610 1615 1620 1625
 cta cac ctc ctg ggc aag ggc acg ctg aga cgc cat gac gac cgg ccc
 5009
 Leu His Leu Leu Gly Lys Gly Thr Leu Arg Arg His Asp Asp Arg Pro
 1630 1635 1640
 cag gtg ctg tcc tat gca gtc cct gtg act gtc atg gag cct cac act
 5057
 Gln Val Leu Ser Tyr Ala Val Pro Val Thr Val Met Glu Pro His Thr

1645

1650

1655

gag tcc ctg aac cca ggc tcc tca ggc ccc aac cca ccc ctc acc ttc
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 Glu Ser Leu Asn Pro Gly Ser Ser Gly Pro Asn Pro Pro Leu Thr Phe
 1660 1665 1670

cat acc cta cag att cgc tcc cgg ggt gtg ccc tat gcc tcc tgc act
 5153
 His Thr Leu Gln Ile Arg Ser Arg Gly Val Pro Tyr Ala Ser Cys Thr
 1675 1680 1685

gcc acc cag agc ttc tct acc ttc cgg tag ccctagactt ggggtcaggg
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 1690 1695

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<212> PRT
<213> Homo sapiens

<400> 4
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 20 25 30
Asp Gly His Pro Glu Tyr Gln Ile Arg Trp Leu Ile Leu Arg Arg Gly
 35 40 45
Asp Glu Gly Asp Gly Gly Ser Gly Gln Val Asp Cys Lys Ala Glu His
 50 55 60
Ile Leu Leu Trp Met Ser Lys Asp Glu Ile Tyr Ala Asn Cys His Lys
 65 70 75 80
Met Leu Gly Glu Asp Gly Gln Val Ile Gly Pro Ser Gln Glu Ser Ala
 85 90 95
Gly Glu Val Gly Ala Leu Asp Lys Ser Val Leu Glu Met Glu Thr
 100 105 110
Asp Val Lys Ser Leu Ile Gln Arg Ala Leu Arg Gln Leu Glu Glu Cys
 115 120 125
Val Gly Thr Ile Pro Pro Ala Pro Leu Leu His Thr Val His Val Leu
 130 135 140
Ser Ala Tyr Ala Ser Ile Glu Pro Leu Thr Gly Val Phe Lys Asp Pro
 145 150 155 160
Arg Val Leu Asp Leu Leu Met His Met Leu Ser Ser Pro Asp Tyr Gln
 165 170 175
Ile Arg Trp Ser Ala Gly Arg Met Ile Gln Ala Leu Ser Ser His Asp
 180 185 190
Ala Gly Thr Arg Thr Gln Ile Leu Leu Ser Leu Ser Gln Gln Glu Ala
 195 200 205
Ile Glu Lys His Leu Asp Phe Asp Ser Arg Cys Ala Leu Leu Ala Leu
 210 215 220
Phe Ala Gln Ala Thr Leu Ser Glu His Pro Met Ser Phe Glu Gly Ile
 225 230 235 240
Gln Leu Pro Gln Val Pro Gly Arg Val Leu Phe Ser Leu Val Lys Arg
 245 250 255
Tyr Leu His Val Thr Ser Leu Leu Asp Gln Leu Asn Asp Ser Ala Ala
 260 265 270
Glu Pro Gly Ala Gln Asn Thr Ser Ala Pro Glu Glu Leu Ser Gly Glu
 275 280 285
Arg Gly Gln Leu Glu Leu Glu Phe Ser Met Ala Met Gly Thr Leu Ile
 290 295 300
Ser Glu Leu Val Gln Ala Met Arg Trp Asp Gln Ala Ser Asp Arg Pro

305	310	315	320
Arg Ser Ser Ala Arg Ser Pro Gly Ser Ile Phe Gln Pro Gln Leu Ala	325	330	335
Asp Val Ser Pro Gly Leu Pro Ala Ala Gln Ala Gln Pro Ser Phe Arg	340	345	350
Arg Ser Arg Arg Phe Arg Pro Arg Ser Glu Phe Ala Ser Gly Asn Thr	355	360	365
Tyr Ala Leu Tyr Val Arg Asp Thr Leu Gln Pro Gly Met Arg Val Arg	370	375	380
Met Leu Asp Asp Tyr Glu Glu Ile Ser Ala Gly Asp Glu Gly Glu Phe	385	390	395
Arg Gln Ser Asn Asn Gly Val Pro Pro Val Gln Val Phe Trp Glu Ser	400	405	410
Thr Gly Arg Thr Tyr Trp Val His Trp His Met Leu Glu Ile Leu Gly	415	420	425
Phe Glu Glu Asp Ile Glu Asp Met Val Glu Ala Asp Glu Tyr Gln Gly	430	435	440
Ala Val Ala Ser Arg Val Leu Gly Arg Ala Leu Pro Ala Trp Arg Trp	445	450	455
Arg Pro Met Thr Glu Leu Tyr Ala Val Pro Tyr Val Leu Pro Glu Asp	460	465	470
Glu Asp Thr Glu Glu Cys Glu His Leu Thr Leu Ala Glu Trp Trp Glu	475	480	485
Leu Leu Phe Phe Ile Lys Lys Leu Asp Gly Pro Asp His Gln Glu Val	490	495	500
Leu Gln Ile Leu Gln Glu Asn Leu Asp Gly Glu Ile Leu Asp Asp Glu	505	510	515
Ile Leu Ala Glu Leu Ala Val Pro Ile Glu Leu Ala Gln Asp Leu Leu	520	525	530
Leu Thr Leu Pro Gln Arg Leu Asn Asp Ser Ala Leu Arg Asp Leu Ile	535	540	545
Asn Cys His Val Tyr Lys Lys Tyr Gly Pro Glu Ala Leu Ala Gly Asn	550	555	560
Gln Ala Tyr Pro Ser Leu Leu Glu Ala Gln Glu Asp Val Leu Leu	565	570	575
Asp Ala Gln Ala Gln Ala Lys Asp Ser Glu Asp Ala Ala Lys Val Glu	580	585	590
Ala Lys Glu Pro Pro Ser Gln Ser Pro Asn Thr Pro Leu Gln Arg Leu	595	600	605
Val Glu Gly Tyr Gly Pro Ala Gly Lys Ile Leu Leu Asp Leu Glu Gln	610	615	620
Ala Leu Ser Ser Glu Gly Thr Gln Glu Asn Lys Val Lys Pro Leu Leu	625	630	635
Leu Gln Leu Gln Arg Gln Pro Gln Pro Phe Leu Ala Leu Met Gln Ser	640	645	650
Leu Asp Thr Pro Glu Thr Asn Arg Thr Leu His Leu Thr Val Leu Arg	655	660	665
His Glu Ala Val Asp Ala Cys Met Ala Cys Leu Arg Ser Pro Asn Thr	670	675	680
Asp Arg Glu Val Leu Gln Glu Leu Ile Phe Phe Leu His Arg Leu Thr	685	690	695
Ser Val Ser Arg Asp Tyr Ala Val Val Leu Asn Gln Leu Gly Ala Arg	700	705	710
Asp Ala Ile Ser Lys Ala Leu Glu Lys His Leu Gly Lys Leu Glu Leu	715	720	725
Ala Gln Glu Leu Arg Asp Met Val Phe Lys Cys Glu Lys His Ala His	730	735	740
Leu Tyr Arg Lys Leu Ile Thr Asn Ile Leu Gly Gly Cys Ile Gln Met	750	755	760
Val Leu Gly Gln Ile Glu Asp His Arg Arg Thr His Arg Pro Ile Asn	765	770	775
Ile Pro Phe Phe Asp Val Phe Leu Arg Tyr Leu Cys Gln Gly Ser Ser	780	785	790
Val Glu Val Lys Glu Asp Lys Cys Trp Glu Lys Val Glu Val Ser Ser	800	805	810

835	840	845
Asn Pro His Arg Ala Ser Lys Leu Thr Asp His Asn Pro Lys Thr Tyr		
850	855	860
Trp Glu Ser Asn Gly Ser Ala Gly Ser His Tyr Ile Thr Leu His Met		
865	870	875
Arg Arg Gly Ile Leu Ile Arg Gln Leu Thr Leu Leu Val Ala Ser Glu		880
885	890	895
Asp Ser Ser Tyr Met Pro Ala Arg Val Val Val Cys Gly Gly Asp Ser		
900	905	910
Thr Ser Ser Leu His Thr Glu Leu Asn Ser Val Asn Val Met Pro Ser		
915	920	925
Ala Ser Arg Val Ile Leu Leu Glu Asn Leu Thr Arg Phe Trp Pro Ile		
930	935	940
Ile Gln Ile Arg Ile Lys Arg Cys Gln Gln Gly Gly Ile Asp Thr Arg		
945	950	955
Ile Arg Gly Leu Glu Ile Leu Gly Pro Lys Pro Thr Phe Trp Pro Val		960
965	970	975
Phe Arg Glu Gln Leu Cys Arg His Thr Arg Leu Phe Tyr Met Val Arg		
980	985	990
Ala Gln Ala Trp Ser Gln Asp Met Ala Glu Asp Arg Arg Ser Leu Leu		
995	1000	1005
His Leu Ser Ser Arg Leu Asn Gly Ala Leu Arg Gln Glu Gln Asn Phe		
1010	1015	1020
Ala Asp Arg Phe Leu Pro Asp Asp Glu Ala Ala Gln Ala Leu Gly Lys		
1025	1030	1035
Thr Cys Trp Glu Ala Leu Val Ser Pro Val Val Gln Asn Ile Thr Ser		1040
1045	1050	1055
Pro Asp Glu Asp Gly Ile Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr		
1060	1065	1070
Leu Glu Cys Gln Glu Ala Val Phe Asn Pro Gln Ser Arg Gly Pro Ala		
1075	1080	1085
Phe Phe Ser Arg Val Arg Leu Thr His Leu Leu Val His Val Glu		
1090	1095	1100
Pro Cys Glu Ala Pro Pro Val Val Ala Thr Pro Arg Pro Lys Gly		
1105	1110	1115
Arg Asn Arg Ser His Asp Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro		1120
1125	1130	1135
Ser Ser Ile Met Arg Asn Leu Thr Arg Cys Trp Arg Ala Val Val Glu		
1140	1145	1150
Lys Gln Val Asn Asn Phe Leu Thr Ser Ser Trp Arg Asp Asp Asp Phe		
1155	1160	1165
Val Pro Arg Tyr Cys Glu His Phe Asn Ile Leu Gln Asn Ser Ser Ser		
1170	1175	1180
Glu Leu Phe Gly Pro Arg Ala Ala Phe Leu Ala Leu Gln Asn Gly		
1185	1190	1195
Cys Ala Gly Ala Leu Leu Lys Leu Pro Phe Leu Lys Ala Ala His Val		1200
1205	1210	1215
Ser Glu Gln Phe Ala Arg His Ile Asp Gln Gln Ile Gln Gly Ser Arg		
1220	1225	1230
Ile Gly Gly Ala Gln Glu Met Glu Arg Leu Ala Gln Leu Gln Gln Cys		
1235	1240	1245
Leu Gln Ala Val Leu Ile Phe Ser Gly Leu Glu Ile Ala Thr Thr Phe		
1250	1255	1260
Glu His Tyr Tyr Gln His Tyr Met Ala Asp Arg Leu Leu Gly Val Val		
1265	1270	1275
Ser Ser Trp Leu Gln Gly Ala Val Leu Glu Gln Ile Gly Pro Cys Phe		1280
1285	1290	1295
Pro Asn Arg Leu Pro Gln Gln Met Leu Gln Ser Leu Ser Thr Ser Lys		
1300	1305	1310
Glu Leu Gln Arg Gln Phe His Val Tyr Gln Leu Gln Gln Leu Asp Gln		
1315	1320	1325
Glu Leu Leu Lys Leu Glu Asp Thr Glu Lys Lys Ile Gln Val Gly Leu		
1330	1335	1340
Gly Ala Ser Gly Lys Glu His Lys Ser Glu Lys Glu Glu Glu Ala Gly		
1345	1350	1355
Ala Ala Ala Val Val Asp Val Ala Glu Glu Glu Glu Glu Glu Glu		1360

Asn Glu Asp Leu Tyr Tyr	1365	Glu Gly Ala Met Pro Glu Val Ser Val Leu	1370	1375
1380	1385	1390		
Val Leu Ser Arg His Ser Trp Pro Val Ala Ser Ile Cys His Thr Leu				
1395	1400	1405		
Asn Pro Arg Thr Cys Leu Pro Ser Tyr Leu Arg Gly Thr Leu Asn Arg				
1410	1415	1420		
Tyr Ser Asn Phe Tyr Asn Lys Ser Gln Ser His Pro Ala Leu Glu Arg				
1425	1430	1435	1440	
Gly Ser Gln Arg Arg Leu Gln Trp Thr Trp Leu Gly Trp Ala Glu Leu				
1445	1450	1455		
Gln Phe Gly Asn Gln Thr Leu His Val Ser Thr Val Gln Met Trp Leu				
1460	1465	1470		
Leu Leu Tyr Leu Asn Asp Leu Lys Ala Val Ser Val Glu Ser Leu Leu				
1475	1480	1485		
Ala Phe Ser Gly Leu Ser Ala Asp Met Leu Asn Gln Ala Ile Gly Pro				
1490	1495	1500		
Leu Thr Ser Ser Arg Gly Pro Leu Asp Leu His Glu Gln Lys Asp Ile				
1505	1510	1515	1520	
Pro Gly Gly Val Leu Lys Ile Arg Asp Gly Ser Lys Glu Pro Arg Ser				
1525	1530	1535		
Arg Trp Asp Ile Val Arg Leu Ile Pro Pro Gln Thr Tyr Leu Gln Ala				
1540	1545	1550		
Glu Gly Glu Asp Gly Gln Asn Leu Glu Lys Arg Arg Asn Leu Leu Asn				
1555	1560	1565		
Cys Leu Ile Val Arg Ile Leu Lys Ala His Gly Asp Glu Gly Leu His				
1570	1575	1580		
Ile Asp Gln Leu Val Cys Leu Val Leu Glu Ala Trp Gln Lys Gly Pro				
1585	1590	1595	1600	
Cys Pro Pro Arg Gly Leu Val Ser Ser Leu Gly Lys Gly Ser Ala Cys				
1605	1610	1615		
Ser Ser Thr Asp Val Leu Ser Cys Ile Leu His Leu Leu Gly Lys GLY				
1620	1625	1630		
Thr Leu Arg Arg His Asp Asp Arg Pro Gln Val Leu Ser Tyr Ala Val				
1635	1640	1645		
Pro Val Thr Val Met Glu Pro His Thr Glu Ser Leu Asn Pro Gly Ser				
1650	1655	1660		
Ser Gly Pro Asn Pro Pro Leu Thr Phe His Thr Leu Gln Ile Arg Ser				
1665	1670	1675	1680	
Arg Gly Val Pro Tyr Ala Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr				
1685	1690	1695		
Phe Arg				